

IRRIGATION SYSTEM, MICROIRRIGATION

Design Survey

The following information shall be obtained and recorded in the field notes:

- a. Profile of main line and lateral lines as needed.
- b. Number of trees to be served.
- c. Maximum water surface elevation or available pressure at source.
- d. Limitations on supply.

Design Data

The following shall be considered minimum in the design of all trickle irrigation systems. The information shall be recorded in the design notes. Appropriate data should be transferred to the construction drawings.

- a. Capacity requirements and needed hydraulics.
- b. Emitter size and type.
- c. Filter requirements.
- d. Pressure reducing requirements.
- e. Material requirements.

Drawings and Specifications

The construction drawings shall include, but will not be limited to the following:

- a. Plan view of trickle system.
- b. Profile of all buried pipelines or notes on plans designating required depth.
- c. Description and location of appurtenances (i.e., valves, filters, pressure reducing valves).
- d. Table of quantities.
- e. Location map (may be combined with a.).
- f. Operating instructions.

Practice specifications along with applicable "Items of Work and Construction Details" shall be provided for each item or phase of construction as needed to clarify the work.

Layout Survey Notes

No layout survey notes are required unless supply lines are buried and require location and cut stakes.

Compliance Checks

All compliance checks shall be recorded in the field notes. Narratives of construction checks shall be recorded on a sheet in the field notes. Compliance checks shall include, but will not be limited to the following:

- a. Profile of pipe trench or statement describing trench depth.
- b. Types of materials being installed.
- c. Lengths and sizes of lines.
- d. Appurtenance checks for conformation with specifications.
- e. Statement of compliance.

As-Built Plans

As-Built drawings shall be prepared for all trickle irrigation systems. These drawings shall reflect all significant changes in linear measurements, quantities, alignment or design changes. If there were no significant changes, the original drawings shall be marked "As-Built".